

Abstract of the Disclosure

A slider unit having built in a moving-coil linear motor ensuring much high propulsion, with even kept slim in the overall height to the extent comparative to the slider units ever used. A moving-coil assembly is made slim in construction, with even high in stiffness. The moving-coil assembly is composed of an iron core of platy-configuration, and at least one set of three-phase armature coils wound around the iron core in the form of flat rectangular configuration in a plane intersecting the sliding direction. As there are more coil sides of the armature coils contributing to the propulsion, compared with a pole width in the moving direction of the field magnets, the high propulsion may be realized. Moreover, since like poles on either field magnet are placed in opposition to each other across the air gap, the magnetic attraction is cancelled to reduce the load on the linear motion guide unit, so that the table is allowed withstanding much load capacity.